

**Annual Report**  
University of Idaho, Cooperative Park Studies Unit  
Cooperative Agreement #1443-CA9000-95-018

1 October 1999 – 30 September 2000

**Introduction**

The Cooperative Park Studies Unit (CPSU) at the University of Idaho has a cooperative agreement with the National Park Service (NPS), Columbia Cascade Support Office to undertake a variety of social science activities. This annual report addresses current subagreements 7, 9, 13, and 17 for all active projects within fiscal year 2000. The report is organized by major projects undertaken in response to each subagreement and modification. Each modification is referenced in the left margin.

**A. Subagreement 7: Cooperative Park Studies Unit Activities**

The CPSU activities under subagreement 7 include a wide variety of social science research projects, research publications, a scholarship program, technical assistance, and other project management activities.

Modification 8      Socioeconomic Regional Atlas

As part of the CPSU's work on ecosystem management, a socioeconomic atlas prototype for parks was initiated and continues to be developed. A design template for the atlas sheets and a final outline of the atlas is complete for the 4 pilot parks. A new GIS/cartography technical assistant was hired. The first atlas is complete and was sent to the park for review. The other three atlases are underway. The project was presented at the 8<sup>th</sup> International Symposium on Society and Resource Management and the Discovery 2000 NPS General Conference, and a presentation has been accepted for the 2001 Annual Meeting of the American Association of Geographers.

Modification 8      Recreational Fee Demonstration Program

Research continued to evaluate the NPS Recreational Fee Demonstration Program. The University of Montana completed its study evaluating the NPS Fee Demonstration Program through visitor surveys in 13 park units. A Research Summary was prepared in May 2000 and 450 copies were provided to the NPS Recreational Fee Demonstration Program.

The management assessment of the NPS Fee Demonstration Program through the collaboration of Pennsylvania State University, University of Wisconsin, and Utah State University was extended (at the request of the Fee Demonstration Program) until April 2000 to include additional analyses. An article based on data from the Phase I survey was published in the *Journal of Park & Recreation Administration*. The final technical report and an executive summary were completed.

Modification 9      Change in reporting requirements.

Modifications 10 and 14      Social Science Program Web Site  
The internet web site for the NPS Social Science Program, at <http://www.nps.gov/socialscience>, received continued use and continues to be updated.

Modifications 10 and 14      Canon National Parks Science Scholars Program  
The Canon National Parks Science Scholars Program was coordinated by the CPSU. The CPSU acted as liaison with the American Association for the Advancement of Science (AAAS) and the National Park Foundation (NPF), in addition to Canon U.S.A., Inc.

The 1999 Canon National Parks Science Scholars Symposium was held in Washington, DC in November. All 14 1999 Canon Scholars attended, along with representatives of Canon U.S.A., Inc., the NPS, the NPF, and the AAAS. The Canon Scholars were recognized, the Second Annual Canon Lecture was given by NPS historian Dr. Richard Sellars, and the Canon Scholars gave presentations about their research.

The CPSU continues to monitor progress of the 1997, 1998, and 1999 Canon Scholars. Phone calls to all Canon Scholars were made during the month of February. Each student had made satisfactory progress on his/her research and was on schedule.

A 1999 annual report was prepared and distributed to parks in October. A comprehensive web site is planned.

Announcements and applications for the 2000 competition were prepared, widely distributed to universities and parks, and posted on the Social Science Program web site in October (over 2000 accesses November 1999 through May 2000). The 2000 competition was advertised in several diverse scientific journals and elsewhere. Student proposals were received, reviewed by AAAS, and seven Canon Scholars were accepted for the 2000 class.

The 2000 Canon National Parks Science Scholars Retreat was held near Yellowstone National Park in May 2000. Eleven Canon Scholars attended, along with representatives from Canon U.S.A., Inc., the NPS, and the NPF. The retreat included training workshops on interacting with the media, a guest lecturer seminar on communicating science to the general public through writing, and Canon Scholar presentations about their research. Among the highlights of the retreat was a field trip and media event in Yellowstone National Park.

Advanced planning for the 2000 Canon National Parks Science Scholars Symposium was conducted.

Modifications 10  
and 14

#### Technical Assistance

The CPSU provides technical assistance to parks, regions, WASO and the Department of the Interior. During FY00, assistance was provided by CPSU staff as follows:

- delivered NPS Discovery 2000 Conference plenary sessions on the future of society and the parks,
- prepared a report on future social and environmental trends facing the NPS and distributed report at Discovery 2000 Conference,
- developed Grand Canyon course on social aspects of resource management at Albright Training Center, and
- continued to assist the US Army Corps of Engineers on Florida Keys carrying capacity study and reviewed draft reports.

Provided technical assistance to the Urban Recreation Research Center at Southern University and A&M College at Baton Rouge, Louisiana. Dr. Machlis:

- served as adjunct faculty member,
- reviewed final work plan, annual report and strategic plan,
- made one site visit,
- participated in URRC advisory committee,
- developed invoicing system,
- reviewed and approved progress reports, and
- assisted in planning for annual job fair.

Modifications 8,  
10, and 14

#### Social Science Research

Oregon State University (OSU), subcontracted to complete the study on the effect of the Fee Demonstration Program on backcountry users, has submitted several progress reports. Surveys were conducted at the Everglades and Grand Canyon National Parks. OSU began data analysis and is preparing a draft report.

Northern Arizona University (NAU), subcontracted to complete a national survey of the American public regarding park visitation, has submitted several progress reports. The survey was conducted and a draft of the report was submitted to the NPS, reviewed and revised. The final report is being prepared. A presentation is being planned for Washington D.C.

Michigan State University (MSU), subcontracted to advance and test the Money Generation Model (MGM), has submitted several progress reports. MSU completed the final technical report, final versions of the software, bulletins and training materials. MSU has posted the model and accompanying materials on their web site at (<http://www.msu.edu/user/stynes/npsmgm/>). MSU is preparing a training workshop for NPS employees.

A Request for Proposals for “Development and Advancement of Carrying

Capacity Management Techniques for the National Park Service” was prepared and distributed in December. Proposals were received, reviewed by a panel, and the project was subcontracted to the Texas Agricultural Experiment Station of the Texas A&M University System. Texas A & M has submitted a progress report. A research assistant was hired for the project in August, and a draft telephone survey is being prepared.

Modification 15      An Interagency Social Science Plan on the human dimensions of fire management was initiated and the scope of work was approved by the NPS. An NPS employee was detailed to the UI CPSU. A literature review and policy analysis were initiated.

Modification 16      Dr. Steve Hollenhurst of the University of Idaho was commissioned to develop a customer satisfaction card for the National Scenic and Historic Trails. The scope of work was approved by the NPS.

A paper on "The Association of Gender, Ethnicity and Social Class in Outdoor Recreation Experiences" was commissioned to be prepared by Dr. Don Rodriguez and a graduate student at Colorado State University. A draft report was received, reviewed and is currently under revision.

Modifications 10, 12, 14      *Social Science Research Review Series*  
The CPSU publishes the *Social Science Research Review*, a series of individual papers focused on particular topics of interest to park managers.

See also:  
Modification 7      The third issue, entitled “Employee Safety in the National Park Service,” by Dr. Seth Tuler of Clark University, was published and distributed in January to all parks and NPS offices, NPS partners (e.g., BRD science centers), and others.

The fourth issue, dealing with carrying capacity, was completed by Dr. Glenn Haas of Colorado State University and will be published early 2001.

See also:  
Modifications 11, 12, 13 and 16      The fifth issue, on public involvement, was prepared by Dr. Jo Ellen Force of the University of Idaho. The public involvement effort is a collaboration with the Alaska Support Office. In addition to the review paper with an Alaskan case study, the project includes a training manual, a pilot training course in public involvement to take place in Alaska, and a final, comprehensive report on the application of public involvement training in other regions and units of the National Park System. The final review paper was submitted to the NPS and the issue will be published Spring 2001.

The sixth issue, on the human dimensions of wildlife management, was commissioned to be written by Dr. Alistair Bath of Memorial University of Newfoundland and Dr. Jody Enck of Cornell University.

The seventh issue, on the human dimensions of federal fire management, was

commissioned to be written by Dr. Seth Tuler of Clark University.

### **Subagreement 9: Visitor Services Project and Visitor Survey Card Activities**

The Visitor Services Project (VSP) conducts in-depth visitor surveys at up to 10 park units each year. The Visitor Survey Card (VSC) assists units within the National Park System to conduct a customer satisfaction survey to help the NPS measure and respond to goals outlined in the Government Performance and Results Act (GPRA). Both projects are included in subagreement 9 of the cooperative agreement.

Modification 21  
See also Modifications  
14, 17, and 19.

Final reports were completed for the following FY 99 VSP studies:

- Big Cypress National Preserve
- Cumberland Gap National Historic Park
- Glacier Bay National Park
- Kenai Fjords National Park
- Lassen Volcanic National Park
- New Bedford Whaling National Historic Park
- Rock Creek Park
- St. Croix National Scenic River
- San Juan National Historic Site

As of September 30, closing workshops or Power Point presentations were completed for four of the nine FY99 parks.

See also: Modifications  
20, 21 and 22

Fieldwork for VSP studies was completed in the following units in FY00:

- Mt. Rainier National Park
- Haleakala National Park
- White House Tours
- Eisenhower National Historic Site
- USS Arizona Memorial
- Olympic National Park
- Badlands National Park

The VSP Fall 1999 newsletter was prepared and distributed in November 1999. The first issue of the NPS Social Science Program newsletter was distributed in February. This new publication, which includes a section on the VSP, will substitute for the VSP newsletter.

The VSP prepared its annual report on visitors, *Serving the Visitor 1999: A Report on Customers of the National Park Service*. The Visitor Survey Card results for 1999 are included in the report. The report was distributed to NPS associate directors, regional directors, superintendents and other managers in April 2000 and posted on the NPS Social Science Program web site.

The VSP Advisory Committee annual meeting was held 1 May 2000 in Washington, DC and 6 parks were selected for 2001 VSP studies.

See Modification 21

#### Visitor Survey Card

The VSC finalized the reporting for the FY99 surveys and delivered all individual park reports and the final reports at the cluster, region and system-wide levels.

The survey cards for FY00 were printed with two new questions and a pilot test was completed. The 2000 VSC workbook was finalized, printed, and posted on the Social Science Program web site.

The FY00 survey was conducted with 324 parks. The scanning and data coding were subcontracted to Visual Input Systems Analysts, Inc., the vendor for FY98 and FY99. As of 30 September, final reports had been sent to 238 parks. System-wide, region and cluster reports are being prepared.

A VSC database is planned in conjunction with the VSP database. Data files from FY98 and FY99 surveys are among the files maintained by the VSC, and the FY00 results will be added. A Request for Proposals for database construction was distributed.

Washington State University (WSU) was subcontracted to conduct research on "Determinants of Response Rates in National Park Satisfaction Surveys" to improve the VSP survey technique. Several progress reports were submitted and WSU completed the planned data analysis. A paper on this project was presented at the 2000 annual meetings for the American Statistical Association and the Rural Sociological Society. A draft report was submitted to the NPS and distributed for peer review. The report is currently being revised.

### **Subagreement 13: NPS Social Science Program**

The UI CPSU manages the NPS Social Science Program, and Dr. Machlis serves as the NPS Visiting Chief Social Scientist. Subagreement 13 specifies the reporting requirements for the Social Science Program.

Modifications 3  
and 4

#### Semi-annual Reports

A FY99 annual report was completed in January 2000 and posted online at <http://www.nps.gov/socialscience/waso/products.htm>. FY00 semi-annual progress reports were completed in February 2000 and June 2000 and posted online.

Modification 5

Change in budget.

### **Subagreement 17: Visitor Risk**

Subagreement 17 was established specifically for work on NPS visitor risk assessment and visitor safety. A Request for Proposals (RFP) for a Comprehensive Study of Visitor Safety in the National Park System was prepared and distributed in November 1999. Eleven proposals were received and a formal review session took place in February 2000. Clark University was subcontracted to conduct this research and work began 1 April 2000. Several progress reports were received and fieldwork was initiated.

### **Publications and Presentations**

Bergerson, T.R. 1999. "The NPS Visitor Survey Card: First-Year Survey and Implications for Park Management." In *On the Frontiers of Conservation: Proceedings of the 10<sup>th</sup> Conference on Research and Resource Management in Parks and on Public Lands*, pp. 76-81. Hancock, Michigan: The George Wright Society.

Bergerson, T.R. 2000. "The NPS Visitor Survey Card: First year survey and implications for park management." In *Park Science* 20(1).

Duffield, J., D. Patterson, C. Neher, and N. Chambers. 2000. *Research Summary: Evaluation of the National Park Service Fee Demonstration Program: 1998 Visitor Survey*. Cooperative Park Studies Unit, University of Idaho, Moscow, Idaho.

Force, J.E., G.E. Machlis, and L. Zhang. 2000. "The Engines of Change in Resource-Dependent Communities," *Forest Science* 46(3): 410-421.

French, J. 1999. *The Canon National Parks Science Scholars Program 1999 Annual Report*. National Park Service, Washington, D.C.

Littlejohn, M. 2000. "Visitor opinions and park resources," *Park Science*, 20(1).

Machlis, G.E. "A Progress Report and Update on the National Park Service Social Science Program," presented at the Third Symposium on Social Aspects and Recreation Research, Tempe, Arizona, February 17, 2000.

Machlis, G.E. "Cooperative Ecosystem Studies Units," and "The Canon National Parks Science Scholars Program," presented at the meeting of the National Park System Advisory Board, San Francisco, California, April 15, 2000.

Machlis, G.E. "Cooperative Ecosystem Studies Units," presented at the Executive Committee Meeting of the National Association of Professional Forestry Schools and Colleges, Washington, DC, March 7, 2000.

Machlis, G.E. "Funding Resources for Social Science Research in the North Cascades -- Part I," presented at the 8<sup>th</sup> International Symposium on Society and Resource Management, Bellingham, Washington, June 20, 2000.

Machlis, G.E. "Key Trends in the Near Future," presented at Discovery 2000: The National Park Service General Conference, St. Louis, Missouri, September 12, 2000.

Machlis, G.E. "Land Matters: Wilderness in Modern America," National Wilderness Stewardship Training Course, Arthur Carhart National Wilderness Training Center, Seattle, Washington, September 22, 2000.

Machlis, G.E. "National Park Service Strategic Planning for the Future," dialogue session at the Trends 2000: 5<sup>th</sup> Outdoor Recreation and Tourism Trends Symposium, Lansing, Michigan, September 20, 2000.

Machlis, G.E. 2000. Review of *The Politics of Ecosystem Management in Environmental Practice* 2(2): 212-213.

Machlis, G.E. "Social Science Tools for Conservation," presentation at the 2000 Science and Stewardship Conference, The Nature Conservancy, Orlando, Florida, February 16, 2000.

Machlis, G.E. 2000. "Usable Knowledge: A progress report on the NPS Social Science Program," *Park Science* 20(1).

Machlis, G.E. "The 7% Solution: Integrating the Social and Biophysical Sciences," presentation at Discovery 2000: The National Park Service General Conference, St. Louis, Missouri, September 12, 2000.

Machlis, G.E. "The 7% Solution: Restructuring the Science Budgets of Federal Land Management and Environmental Agencies" presented to the National Parks and Conservation Association, Washington, DC, December 8, 1999 and at the 8<sup>th</sup> International Symposium on Society and Resource Management, Bellingham, Washington, June 20, 2000.

Machlis, G.E. "An Update on the National Park Service Social Science Program," presented at the 1999 Congress on Recreation and Resource Capacity, Snowmass Village, Colorado, November 30, 1999.

Machlis, G.E. "Serving the Visitor: Customer Surveys in the National Parks," presented at the Customer Satisfaction Surveys in Government Conference, GPRA Institute and the International Quality and Productivity Center, Arlington, Virginia, November 3, 1999.

Machlis, G.E. "The Canon National Parks Science Scholars Program: Progress 1997-1999," presentation to Canon U.S.A., Inc., National Park Foundation, Washington, DC, November 8, 1999.

Machlis, G.E., T.R. Bergerson, and M. Littlejohn. 2000. *Serving the Visitor 1999: A Report on Customers of the National Park Service*. Cooperative Park Studies Unit, University of Idaho, Moscow, Idaho.



Machlis, G.E., and D.R. Field, eds. 2000. *National Parks and Rural Development: Practice and Policy in the United States*. Washington, D.C.: Island Press.

Machlis, G.E., and J.E. McKendry "Extended Gap Analysis for Biodiversity Conservation," poster presentation at the American Institute of Biological Sciences Annual Meeting, Washington, DC, March 23, 2000.

Machlis, G.E., and J.E. McKendry. "NPS Social Science Program, " presentation at training course on Fundamentals for Natural Resource Management, National Park Service, Horace M. Albright Training Center, Grand Canyon, Arizona, April 3, 2000.

Machlis, G.E., J. Rogers, D. Bray, J. Cinner and B. Forist. 2000. "A Look Ahead: Key Social and Environmental Forecasts Relevant to the National Park Service." Cooperative Park Studies Unit, University of Idaho, Moscow, Idaho.

McKendry, J.E. and N. Chambers. 2000. "A socioeconomic atlas for park management," *Park Science* 20(1).

McKendry, J.E. "A socioeconomic atlas for park management" presented at the 8<sup>th</sup> International Symposium on Society and Resource Management, Bellingham, Washington, June 20, 2000 and at the Discovery 2000: The NPS General Conference, St. Louis, Missouri, September 12, 2000.

Visitor Services Project Visitor Survey Reports:

Big Cypress National Preserve  
Cumberland Gap National Historic Park  
Glacier Bay National Park  
Kenai Fjords National Park  
Lassen Volcanic National Park  
New Bedford Whaling National Historic Park  
Rock Creek Park  
St. Croix National Scenic River  
San Juan National Historic Site

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